

REMARKS

The Office Action mailed April 4, 2005 has been reviewed and carefully considered. Claims 26 and 27 are canceled without prejudice. Claims 13-25 are pending.

The independent claims remain 13 and 18. Claim 13 is amended. Reconsideration of the above-identified application, as amended and in view of the following remarks, is respectfully requested.

Claims 13-27 stand rejected under 35 U.S.C. 112, first paragraph, as failing to meet the written description requirement.

The inquiry into whether the description requirement is met must be determined on a case-by-case basis and is a question of fact. *In re Wertheim*, 541 F.2d 257, 262, 191 USPQ 90, 96 (CCPA 1976). A description as filed is presumed to be adequate, unless or until sufficient evidence or reasoning to the contrary has been presented by the examiner to rebut the presumption. See, e.g., *In re Marzocchi*, 439 F.2d 220, 224, 169 USPQ 367, 370 (CCPA 1971). The examiner, therefore, must have a reasonable basis to challenge the adequacy of the written description. The examiner has the initial burden of presenting by a preponderance of evidence why a person skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the claims. *Wertheim*, 541 F.2d at 263, 191 USPQ at 97. MPEP 2163.04.

The final Office Action (hereinafter "Office Action") suggests that it has rebutted, by "sufficient evidence or reasoning to the contrary," the presumption that "a person skilled in the art would" "recognize in applicant's disclosure a description of the invention defined" by claim 26.

The Office Action then, as its purported rebuttal, discusses a claimed "gas feeder" and "one or more respective positions axially around the upper gas feeding section."

Problematically, however, although claim 13 recites both expressions, claim 26 contains neither expression. The applicants accordingly submit that, at least as to claim 26, no proper rebuttal has been presented by the Examiner.

In apparent recognition of this difficulty, the Office Action proclaims “it is deemed” that claim 26 claims “the same thing” as claim 13 (see last full paragraph on page 3 of the Office Action).

The Office Action seems to base this proclamation on what the Office Action regards as admissions by the applicants. This seems to be somewhat akin to an applicant admitting that an apple is an orange.

As part of its “the same thing” analysis, the Office Action, incorrectly characterizes the March 9, 2005 reply to the most recent, just-prior Office Action of December 9, 2004. In particular, the current Office Action says, “As to claims 26-27: Applicant argues that these claims are allowable for the same reason that claim 13 is are.”

Referring, however, to the March 9, 2005 reply, it states that new, independent claim 26 distinguishes “over the prior art of record for the same reasons set forth, in the prior Office Action replies, with regard to claim 13.” Reference is made to “prior Office Action replies,” because, on March 9th, no claim of record stood rejected by prior art (see Office Action dated December 9, 2004, “Conclusion” section). More specifically, the rejection of claim 13 based on U.S. Patent No. 4,578,098 had been previously withdrawn by the Examiner due to the persuasiveness of the September 23, 2004 Office Action reply. Being persuasive was not difficult, since Paek bears very little resemblance to claim 13. Claim 26 is sufficiently similar to claim 13 to be

distinguishable over Paek by virtually the same reasoning set forth in the September 23rd reply.

By citing to the March 9, 2005 statement, the instant Office Action seemingly concludes that, by virtue of allegedly rebutting the presumption for claim 13 based on two phrases in claim 13, the presumption for claim 26 is likewise rebutted. This conclusion ignores the fact that claim 26 contains neither of the two phrases. For at least the above reasons, the applicants submit that the Office Action fails to properly rebut the presumption that claim 26 is adequately described in the present disclosure. Since, however, claim 26 is canceled, it is unnecessary to request reconsideration and withdrawal of the rejection of claim 26.

As to claim 18, it contains only one of the two phrases, i.e., a “gas feeder.” To the extent the Office Action can be credited with paying any more attention to claim 18 than to claim 26, it appears that only the second full paragraph on page 3 might be “intended” for claim 18. This second full paragraph attempts to rebut the presumption that adequate disclosure exists for the “gas feeder” of claim 18, based on the lack of an explicit reference to the term “gas feeder” in the disclosure.

The applicants first note that the first sentence of the last paragraph on page 2 of the Office Action acknowledges, “that an argument could be made there is implicit support for a feeder, because the gas is fed (see page 12 [of the instant specification], line 15 for instance).”

In addition, page 12 of the specification, at line 8, states, “FIG. 7 and FIG. 8 shows a cooling unit 70 . . .” The cooling unit 70 relates to “An apparatus for cooling” which is what claim 18 claims. Both FIGs. 7 and 8 show a port P. The reference to a

“port P” is explained in various places of the disclosure which refer to “gas feeding ports P.” The specification also mentions “gas-communicating openings 42” (page 11, line 2; page 12, lines 12-13). The “radial passageways” of claim 18 are discussed in the specification, which states that the “openings 42 are extended toward the center of the rotary body 40” (page 11, lines 4-5; arrows in FIG. 8).

Claim 18 reads:

An apparatus for cooling an optical fiber drawn from an optical fiber preform in drawing systems mounted to an optical fiber draw tower, said apparatus comprising: a main body extending in the longitudinal direction of the fiber; an upper gas feeding section over said main body, said upper gas feeding section including a first hollow rotary body having a plurality of radial passageways for gas and further includes a plurality of gas feeding ports located at respective positions axially around the upper gas feeding section; on/off switches respectively connected to the plural ports; and a gas feeder for supplying, by means of the plural ports, a gas feed to the plural passageways, said apparatus being configured to operate the switches so as to rotate said gas feed to cause non-uniform delivery of the gas to the fiber to create a temperature difference to reduce polarization mode dispersion of the fiber.

The Office Action takes issue with the phrase “axially around,” but acknowledges in the first paragraph of page 3 that “Figure 8 reasonably shows four positions that are ‘around.’” Claim 18 recites, “gas feeding ports located at respective positions axially around the upper gas feeding section. FIG. 7 shows an upper gas feeding section 72, a top view of which is shown in FIG. 8. The applicants believe that the phrase “axially around” is even more specific, in the context of claim 18, than the expression “around.” In particular, it is at least imaginable, in the abstract, of various ways in which entities might be around the “upper gas feeding section” described in the context of claim 18, whereas “axially around” is more specific.

The Office Action also suggests that, although a gas feeder is implied in

the disclosure, it is unknown whether the applicants envisioned a plurality of gas feeders “for supplying, by means of the plural ports,” and that, therefore, the applicants cannot claim “a gas feeder.” However, the instant specification states, “Flow rate of the gas fed to . . . the cooling unit 70 of the present invention is controlled by a flow regulator . . .” The applicants submit that “a flow regulator” for the gas fed to the entire unit 70 implies “a gas feeder.”

For at least all of the above reasons, the applicants submit that the Office Action fails to properly rebut the presumption that claim 18 is adequately described in the present disclosure. Reconsideration and withdrawal of the instant rejection as to claim 18 are respectfully requested.

Regarding claim 13, it recites:

An apparatus for cooling an optical fiber drawn from an optical fiber preform in drawing systems mounted to an optical fiber draw tower, said apparatus comprising: a main body extending in the longitudinal direction of the fiber; an upper gas feeding section over said main body, wherein said upper gas feeding section includes a first hollow rotary body having at least one radial passageway for gas; and a gas feeding port for supplying, from one or more respective positions on the upper gas feeding section, a gas feed to the at least one passageway, said apparatus being configured to rotate said rotary body to cause non-uniform delivery of the gas to the fiber to create a temperature difference to reduce polarization mode dispersion of the fiber.

Although four radial passageways for gas, and four respective positions, are shown in FIG. 8, the specification states, regarding the “plurality of gas feeding port P . . . Four gas feeding ports P are provided, as shown in FIG. 2 and FIG. 3, for illustrative purposes. However, the number of ports should not impose limitations on the scope of the invention.” (page 8, lines 15-19). Originally-filed claim 13 states, “. . . at least one opening extended in the direction of the center . . .” Page 4, line 14, likewise recites, “at least one opening extended in the direction of the center . . .”

The Office Action suggests that “a person skilled in the art would not recognize in” the applicants’ “disclosure a description of the invention defined” by claim 13, because, in the case of a single radial passageway/respective position, claim 13 states “one or more respective positions axially around the upper gas feeding section.”

The applicants submit, however, that the above-mentioned reference to “at least one opening” and the specification’s mention that the number of ports imposes no limitation on the invention describe, in combination with the disclosure as a whole, the invention defined by claim 13. Notably, even in the case of a single radial passageway/respective position, the adverb “axially” makes the adjective “around” more specific in conveying the relative spatial relationships of the position and the rotary body.

Nevertheless, to move prosecution forward, the term “on” is substituted in claim 13 for the expression “axially around.” This amendment finds support in FIG. 3, for example, and accompanying text in the specification.

Likewise, since the Office Action expresses discomfort with the word "feeder," the expression "feeding port" is substituted. This expression finds support in the same portions of the applicant's disclosure cited above with respect to the word "feeder."

For at least all of the above reasons, the applicants submit that the Office Action fails to properly rebut the presumption that claim 13 is adequately described in the present disclosure. Reconsideration and withdrawal of the instant rejection as to claim 13 are respectfully requested.

Claims 13-27 stand rejected under 35 U.S.C. 112, second paragraph, as indefinite.

The Office Action takes issue with two phrases: "gas feeder," and "axially around."

Claim 18 recites one of the phrases, "gas feeder."

The Office Action states:

It is unclear what is meant by the newly claimed "feeder." Specifically, Examiner cannot tell if it includes, excludes, or is limited to any/all of the following: the "switch" of page 8, line 19, port(s), the flow regulator (page 12, line 16), the controlling computer (page 12, line 16).

The switches are the third element of claim 18, whereas the gas feeder is the fourth element of claim 18. Accordingly, it seems clear that the gas feeder of claim 18 does not include the switches.

As to the ports, claim 18 states that the upper gas feeding section "includes a plurality of gas feeding ports . . ." The upper gas feeding section is the second element of claim 18, whereas the gas feeder is the fourth element of claim 18. Accordingly, it seems

clear that the gas feeder of claim 18 does not include the ports.

The flow regulator and controlling computer disclosed in the specification are not mentioned in claim 18, but the applicants are unaware of any requirement that a patent claim recite every feature mentioned in the specification.

The examiner's focus during examination of claims for compliance with the requirement for definiteness of 35 U.S.C. 112, second paragraph, is whether the claim meets the threshold requirements of clarity and precision, not whether more suitable language or modes of expression are available. When the examiner is satisfied that patentable subject matter is disclosed, and it is apparent to the examiner that the claims are directed to such patentable subject matter, he or she should allow claims which define the patentable subject matter with a reasonable degree of particularity and distinctness. Some latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire. Examiners are encouraged to suggest claim language to applicants to improve the clarity or precision of the language used, but should not reject claims or insist on their own preferences if other modes of expression selected by applicants satisfy the statutory requirement. The essential inquiry pertaining to this requirement is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity. Definiteness of claim language must be analyzed, not in a vacuum, but in light of:

- (A) The content of the particular application disclosure;
- (B) The teachings of the prior art; and
- (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made. MPEP 2173.02.

The gas feeder of claim 18 is recited in claim 18 as follows:

a gas feeder for supplying, by means of the plural ports, a gas feed to the plural passageways, said apparatus being configured to operate the switches so as to rotate said gas feed to cause non-uniform delivery of the gas to the fiber to create a temperature difference to reduce polarization mode dispersion of the fiber

It is unclear to the applicants what, if anything, the Office Action finds indefinite about the gas feeder of claim 18. The applicants submit that one of ordinary skill in the art would not have found the gas feeder of claim 18 to be indefinite.

Reconsideration and withdrawal of the rejection as to claim 18 are respectfully requested.

As to claim 13, the Office Action apparently takes issue with the phrase "axially around," but the applicants believe that the meaning of the phrase is clear from the claim as a whole in the context of the disclosure.

As mentioned above, claim 13 is amended to instead recite a "gas feeding port," in particular:

a gas feeding port for supplying, from one or more respective positions on the upper gas feeding section, a gas feed to the at least one passageway, said apparatus being configured to rotate said rotary body to cause non-uniform delivery of the gas to the fiber to create a temperature difference to reduce polarization mode dispersion of the fiber

Reconsideration and withdrawal of the rejection as to claim 13 are respectfully requested.

The specification stands objected to under 37 CFR 1.75(d)(1) and MPEP § 608.01(o) as failing to provide proper antecedent basis for claimed subject matter. The Examiner requires explicit mention in the specification of the gas feeder and, in relation to the radial passageways, respective positions axially around the upper gas feeding section. Amendment of the specification in compliance with the requirement is believed to have been made by virtue of the instant revisions to the specification. Of the four paragraphs

amended, the changes to the fourth paragraph are inherent, and the changes to the preceding three paragraphs find support in the fourth paragraph.

Claims 26-27 stand rejected under 35 U.S.C. 102(b) as anticipated by U.S. Patent No. 4,578,098 to Paek et al. ("Paek").

Claim 26 recites, "at least one opening extended radially toward an axial center . . . said rotary body having at least one slit in said inner surface . . . said apparatus being configured to receive a gas feed communicating . . . gas through said opening radially toward said center . . ."

Paek fails to disclose or suggest the above features of claim 26 and fails to anticipate the present invention as recited in claim 26 for at least this reason.

Nevertheless, to move prosecution forward, claims 26 and 27 are canceled without prejudice.

As to the other rejected claims, each depends from a respective base claim and is deemed to distinguish patentably over the cited reference for at least the same reason(s) set forth above with regard to the base claim.

In view of the foregoing amendments and remarks, it is believed that this application is now in condition for allowance. The Examiner is invited to contact the undersigned in the event of any perceived outstanding issues so that passage of the case to issue can be effected without the need for a further Office Action.

In the event that any additional fee is required to continue the prosecution of this Application as requested, please charge such fee to Deposit Account No. 502-470.

Respectfully submitted,

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